

The amended and new claims are fully supported by the original disclosure. In particular, the addition of the term "solid" to claims 1, 6, 20 and 23 is supported in Figs. 2-4. This term is recognized in the art as being "not hollow" or not having a macroscopic passage extending through the core. Bailey, U.S. Patent No. 2,330,257, at page 3, column 2, lines 63-65 and Figs. 13-17. Additional amendments to claim 23 are supported in claim 1 as originally filed. The remaining amendments are merely clarifying the claim language as suggested in the last Office Action.

The amendment to the specification is fully supported in the specification as originally filed. The elimination of the term "Fig. 2" from page 4, line 13, corrects a ministerial error. The amendment to page 1, line 36 and page 5, lines 8-9, returns the passage to the originally filed language with a minor clarification of terms. The amended terms are recognized by those of ordinary skill in the art.

The amendment to Fig. 10 of the drawing is fully supported in Figs. 1-3 of the drawing. The amendments to Figs. 6-9 are fully supported in the specification at page 4, lines 7-12. No new matter is added by these amendments.

Objections

The Office Action indicates that the declaration is defective as it contains non-initialled alterations. A supplemental declaration is being obtained from overseas applicants. It will be submitted upon receipt.

The Office Action objected to the drawing as Numerals 17 in Fig. 10 did not appear to extend to the ribs of the tampon. This figure has been amended to address this objection.

The Office Action objected to the amendments filed February 1, 1993, and August 16, 1993, as containing new matter. In particular, the Office Action objects to amendments to (1) page 1, line 36, and page 5, lines 8 and 9; (2) page 3, lines 20 and 21,

page 4, lines 19 and 21, and page 7, line 26; and (3) page 4, line 13.

Applicants have again amended the specification relating to (1) above. In this amendment, the language has been returned to the originally filed language with a minor substitution of the art-recognized term "withdrawal string" for the original term "recovery tape". Applicants submit that this substitution would readily be recognized by those of ordinary skill in the art and that this substitution is necessitated by the choice of terms made during the translation of the specification from German.

Applicants have again amended the specification relating to (2) above. Applicants submit that the current amendments are fully supported, both explicitly and inherently, in the original specification. In support of this position, Applicants provide the declaration of Ms. Helena Engqvist.

Applicants have amended the specification at page 4, line 13 to address the concern of the Office Action. The passage now clearly relates to the tampon of the invention.

Rejections of the Claims

The Office Action objected to the specification and Figs 1, 2 and 4 of the originally filed application under 35 U.S.C. §112, 1st paragraph, as failing to adequately teach or describe the invention. In addition, claims 1-12 and 14-23 stand rejected for the same reasons.

First, the Office Action addresses the issue of whether the original specification supports the description of two embodiments. While Applicants believe that the originally filed specification supports the existence of two embodiments of the invention, Applicants have amended the specification to clearly conform it to the originally filed specification. Included in the current amendments are additional language which makes explicit information which was implicit in the original specification.

The present invention relates to the formation of a tampon from a wound-up length of a tape-shaped fibrous material. This wound-up

length is a tampon blank, and it is under little compression. The tampon blank is then compressed to ultimately form the finished tampon.

After fibrous tampon blanks are compressed, the blank tends to expand back to its original dimension. Engqvist ¶2. To form tampons having stable finished dimensions, tampon blanks are generally over-compressed. Over-compression can restrict the tendency of the fibrous blank to expand. Expansion after over-compression is least in areas of greatest compression and greatest in areas of lower compression. Engqvist ¶2.

There is significant variability in compressing absorbent fibrous tampon blanks in a commercial process. This variability arises (1) in strict control of the amount of fibers which make up the tampon blank, (2) in the degree of compression of the blank and precise control of the location of the blank in the press to provide uniform compression, and (3) in the degree of post-compression expansion. Engqvist ¶4. This variability is readily recognized by those of ordinary skill in the tampon-forming art.

The present application teaches, for example, obtaining a tampon blank having a weight of about 2.4 g, compressing this into an eight-grooved preform, and compressing the ribs of the preform to result in a tampon having a diameter of about 13 to 15 mm. The process disclosed in the present application will be subject at least to the three sources of variability disclosed above. This variability will provide tampons in which the distal ends of adjacent ribs touch, tampons in which the distal ends of adjacent ribs are slightly separated by a gap and tampons which have a combination of touching and separated ribs. Engqvist ¶5. Skilled artisans will recognize from the originally filed specification that a tampon of the present invention will have longitudinal grooves, the outer ends of which may be open, closed or some combination of open and closed. Therefore, Applicants submit that original specification fully supports the present specification language.

Second, the Office Action alleges that claim 15 is not fully supported in the specification and requests that appropriate claim language be imported into the specification. In response, Applicants respectfully point to the specification at page 8, lines 29-31. These lines disclose that the pressing faces of the press cutters assume a clear distance to the longitudinal center axis of the press of 2 mm, or 4 mm. Applicants submit that this language fully supports the range of 2 to 4 mm in claim 15.

For the reasons outlined above, Applicants submit that the specification fully supports the presently pending claims. Reconsideration of the rejection of Claims 1-12 and 14-23 under 35 U.S.C. §112, 1st paragraph, is respectfully requested.

Claims 1-12, 14-19 and 21-23 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants request reconsideration of this rejection.

The Office Action identifies language for clarification in the claims. In particular, the Office Action identifies language in claims 1, 2, 5, 6, 10-12, 15, 16 and 22. Applicants have amended claims 1, 2, 5, 10-12, 15 and 16 to address these concerns. Claims 6-8 and 22 have been cancelled above. Therefore, Applicants request that the rejection under 35 U.S.C. §112, second paragraph, be reconsidered and withdrawn.

Claims 1, 20 and 23 stand rejected under 35 U.S.C. §102 (b) as being anticipated by, or in the alternative §103 as being obvious in view of, Rabell, U.S. Patent No. 2,425,004. Applicants respectfully request reconsideration of this rejection.

The present invention relates to a tampon for feminine hygiene having a generally cylindrical compressed, solid fiber core from which longitudinal ribs extend radially outward. Each of the ribs is compressed less than the fiber core and has a coarser capillary structure. Each of the ribs is separated from an adjacent rib by a longitudinal groove where the rib is connected to the core. The tampon may be formed from an approximately cylindrical blank having

a circumferential surface obtained by winding up a length of tape-shaped nonwoven material. One purpose of the present invention is to form a tampon which has equivalent radial expansion along the length of the compressed product.

Rabell relates to a tampon formed from a sheet of material which is pursed into a cup-like shape and then compressed. There is a longitudinal compression gradient (see column 6, lines 56-69), the finished tampon has a hollow core, (see Figures 3 and 12), and during expansion, the material tends to open up radially as though hinged at the base of the tampon (see column 7, lines 40-55). A primary purpose of Rabell is to produce a tampon which expands to form a cup-like shape.

Rabell uses a flat sheet of absorbent material which is pursed to form the tampon blank. Rabell's purpose is to form a tampon which expands to form a cup-like shape. It does not teach or suggest winding a tape-shaped nonwoven material to form an approximately cylindrical blank. Thus, Rabell cannot anticipate or render obvious independent claims 1 and 20.

The prior art recognizes a difference between hollow and solid cores in tampon manufacture. See Bailey at page 3, column 2, lines 63-65 and Figures 13-17. Rabell discloses a hollow core. A hollow core does not provide a dense capillary structure. Applicants are not aware of a tampon having a hollow core which provides the strong, central core of the present invention. Rabell neither teaches nor suggests the use of a solid core. Therefore, Rabell cannot anticipate or render obvious independent claims 1, 20 and 23. Withdrawal of the rejection of these claims under 35 U.S.C. §§102(b) and 103 is respectfully requested.

Claims 6 and 7 stand rejected under 35 U.S.C. §103 as being unpatentable over Rabell in view of Bailey. Because these claims have been cancelled in this application, Applicants request that this rejection be withdrawn.

In view of the foregoing amendments and remarks, Applicants respectfully submit that Claims 1-5, 9-12, 14-21 and 23-26 are in

proper condition for allowance. Favorable action is therefore requested.

Respectfully submitted,



Joel A. Rothfus
Attorney for Applicant
Registration No. 33,277

Johnson & Johnson
One Johnson & Johnson Plaza
New Brunswick, New Jersey 08933-7003
(908) 524-2722
Date: August 19, 1994